

REMARKS

Claims 1, 2, 3 and 6 have been rejected by the Examiner under 35 USC 102(b) as being anticipated by Schmid et al., U.S. Patent 5,624,486. Claims 13 and 14 have been rejected by the Examiner under 35 USC 102(e) as being anticipated by U.S. Patent Publication US2004/0194663 to Li et al. Claims 4 and 5 have been rejected by the Examiner under 35 USC 103(a) as being unpatentable over Schmidt et al. as applied to claim 1 and further in view of U.S. Patent Publication US2004/01944663 to Li et al. Claims 7-11 have been rejected by the Examiner under 35 USC 103(a) as being unpatentable over Jenkins et al., U.S. Patent 5,637,143 in view of Schmidt et al. Claims 12 and 15 have been rejected by the Examiner under 35 USC 103(a) as being unpatentable over Jenkins et al. and Schmidt et al. and further in view of Li et al. These rejections are respectfully traversed.

The present invention is directed to an aluminum pigment containing aluminum particles, a molybdenum coat comprising a molybdenum oxide and/or a molybdenum hydrate covering the surface of each of the aluminum particles and a silica coat comprising amorphous silica and/or a coat prepared from a silane coupling agent further covering the molybdenum coat. Thus, the sequence of the various coatings, that is, the fact that the aluminum particles are first covered with the molybdenum coat and then the molybdenum coat is covered with the silica coat, is one of the important features of the present invention. The sequence in which the various coats are applied also, by definition, would form a very important part of the method of manufacturing an aluminum pigment as defined by the present invention. As recited in composition claim 1 and method claim 7 of the present application, a molybdenum coat is first formed on the aluminum particles and then a silica coat is formed on the aluminum particles already coated with a molybdenum coat. As noted on page 11 of the present application, the molybdenum coat which is formed on the surface of each aluminum particle serves as a core for precipitation for simplifying the formation of the silica coat which further covers the surface of the molybdenum coat. Furthermore, the molybdenum coat has a constant corrosion resistance so that the aluminum pigment containing the molybdenum coat is improved in corrosion resistance. In addition, the molybdenum coat also has the effect of preventing abnormal reaction between a

treatment solution (that is, a solution containing water and having a strong alkalinity or acidity) in the presence of forming a silica coat and/or a coat prepared from a silane coupling agent and each aluminum particle covered with the molybdenum coat. Thus, the aluminum pigment as defined by claims 1 and 7 of the present application has the effect that the corrosion resistance is greatly improved by following the specific sequence as recited in both the specification and the claims of the present application.

By contrast to the teachings of the present invention, the coating sequence of the pigments disclosed in the Schmidt et al. patent is the reverse of the present invention because the molybdenum coat is not formed directly on the aluminum pigment but rather is formed on the silica coat. This is clear by referring to Examples 1 and 2 of the Schmidt et al. patent which clearly shows that the sequence of the molybdenum and silica coats are directly opposite to that of the present invention. This being the case, it is understandable why the Schmidt et al. patent is silent with respect to the effect of the present invention, that is, that the molybdenum coat serves as a core for precipitation for a silica coat. Since the rejections of all of the claims, except claims 13 and 14, rely upon the teachings of the Schmidt et al. patent, and since the Schmidt et al. patent fails to show the Applicants' specific sequence of coatings as well as the benefits derived by providing such a sequence, it is believed that all of the rejections which rely upon the teachings of the Schmidt et al. patent must fail. Furthermore, since claims 13 and 14 have been cancelled from the present application, it is believed that the rejection of these claims as being anticipated by the Li et al. patent has been obviated.

Accordingly, in view of the above amendments and remarks reconsideration of the rejections and allowance of all of the claims of the present application are respectfully requested.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Joseph A. Kolasch Reg. No. 22,463 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

Application No. 10/525,068
Amendment dated January 30, 2007
Reply to Office Action of October 31, 2006

Docket No.: 0033-0983PUS1

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.14; particularly, extension of time fees.

Dated: January 30, 2007

Respectfully submitted,

By 

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